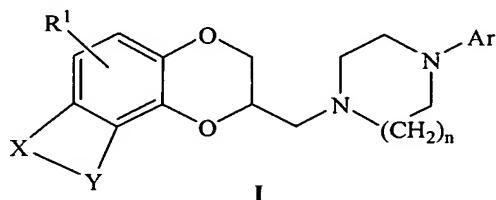


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (currently amended) A compound of formula I:



wherein

R^1 is hydroxy, halo, cyano, carboxamido, carboalkoxy of 2 to 6 carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

the group $X-Y$ is $-N=C(R^2)-C(R^3)=N-$, $-N=C(R^2)-C(R^4)=CH-$, $-N=C(R^2)-N=CH-$, $-N=C(R^2)-O-$, or $-NH-C(R^5)=CH-$;

R^2 and R^3 are, independently, hydrogen, halo, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms or alkyl of 1 to 6 carbon atoms;

R^4 is hydrogen or alkyl of 1 to 6 carbon atoms;

R^5 is hydrogen, halo, trifluoromethyl, pentafluoroethyl or alkyl of 1 to 6 carbon atoms;

Ar is phenyl, naphthyl, indolyl, indazolyl, thienyl, pyridinyl, pyrimidinyl, quinolinyl, benzofuranyl, **dihydrobenzodioxinyl**, benzothienyl, benzoisothiazolyl, or benzisoxazolyl, each optionally substituted with one to three substituents independently selected from hydroxy, halo, cyano, carboxamido, carboalkoxy of 2 to 6 carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6

carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms; and

n is 1 or 2;

or pharmaceutically acceptable salts thereof.

2. (*original*) A compound according to claim 1, wherein R¹ is hydrogen, halo, cyano, trifluoromethyl, alkyl of 1 to 6 carbon atoms or alkoxy of 1 to 6 carbon atoms.

3. (*original*) A compound according to claim 1, wherein R¹ is hydrogen, halo or alkoxy of 1 to 6 carbon atoms.

4. (*original*) A compound according to claim 1, wherein R¹ is hydrogen.

5. (*original*) A compound according to claim 1, wherein Ar is phenyl, quinolinyl, benzofuranyl, benzothienyl, or indolyl, each optionally substituted.

6. (*original*) A compound according to claim 1, wherein X-Y is $-N=C(R^2)-C(R^4)=CH-$ and R⁴ is hydrogen or alkyl of 1 to 3 carbon atoms.

7. (*original*) A compound according to claim 1, wherein R² and R³ when present are independently selected from hydrogen, amino or alkyl of 1 to 6 carbon atoms.

8. (*original*) A compound according to claim 1, wherein R² and R³ when present are independently hydrogen or alkyl of 1 to 3 carbon atoms.

9. (*original*) A compound according to claim 1, wherein R⁵ is hydrogen, trifluoromethyl, pentafluoroethyl or alkyl of 1 to 6 carbon atoms.

10. (*original*) A compound according to claim 1, wherein R⁵ is hydrogen, trifluoromethyl or alkyl of 1 to 3 carbon atoms.

11. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(3-chlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
12. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(4-chlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
13. (*currently amended*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(3,4-dichlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxine [2,3-f]quinoline (2S)-2-{[4-(3,4-dichlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxine [2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
14. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(2-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
15. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(3-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
16. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(4-methoxyphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
17. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(dihydrobenzo[1,4]dioxin-5-yl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

18. (*currently amended*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[4-(3-trifluoromethyl-phenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline (2S)-8-methyl-2-[4-(3-trifluoromethyl-phenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxine[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

19. (*currently amended*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[4-(3-fluorophenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline (2S)-8-methyl-2-[4-(3-fluorophenyl)piperazin-1-ylmethyl]-2,3-dihydro[1,4]dioxine[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

20. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(2,3-dimethylphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

21. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(3,4-dimethylphenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

22. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-[(4-quinolin-2-yl)piperazin-1-yl]methyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

23. (*original*) A compound according to claim 1, wherein said compound is ((2S)-8-methyl-2-{4-(6-nitroquinolin-2-yl)piperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

24. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{4-(6-chloroquinolin-2-yl)piperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

25. (*original*) A compound according to claim 1, wherein said compound is 2-(4-{[(2S)-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl}piperazin-1-yl}quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

26. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

27. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{[4-(5-fluoro-1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

28. (*original*) A compound according to claim 1, wherein said compound is ((2S)-2-{[4-(7-methoxy-1-benzofuran-3-yl)-1-piperazinyl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

29. (*original*) A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{[(2S)-2-methyl-4-quinolin-2-ylpiperazin-1-yl]methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

I.

30. (*original*) A compound according to claim 1, wherein said compound is 2-((3R)-3-methyl-4-{[(2S))-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl}piperazin-1-yl]quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

31. *(original)* A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{{(2R)-2-methyl-4-quinolin-2-yl}piperazin-1-yl}methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
32. *(original)* A compound according to claim 1, wherein said compound is (2S)-8-methyl-2-{{4-(2-naphthyl)piperazin-1-yl}methyl}-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.
33. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-[4-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-2-yl]-piperazin-1-yl]-quinoline-6-carboxylic acid amide or a pharmaceutically acceptable salt thereof.
34. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-[4-(2,3-Dihydro-[1,4]dioxino[2,3-f]quinolin-2-yl)methyl]-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.
35. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-[4-(8-Ethyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-2-yl)methyl]-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.
36. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-[4-(2-Methyl-7,8-dihydro-1,6,9-trioxa-3-aza-cyclopenta[a]naphthalen-8-yl)methyl]-piperazin-1-yl]-quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.
37. *(original)* A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-Bromoquinolin-2-yl)piperazin-1-yl}methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

38. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-Bromoquinolin-2-yl)piperazin-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

39. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-methoxyquinolin-2-yl)piperazin-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

40. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-Trifluoromethoxyquinolin-2-yl)piperazin-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

41. (*original*) A compound according to claim 1, wherein said compound is 2-[4-(6-Fluoroquinolin-2-yl)-piperazin-1-ylmethyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

42. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-methoxyquinolin-2-yl)-1,4-diazepan-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

43. (*original*) A compound according to claim 1, wherein said compound is 2-(4-{{(2S)-8-Methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl)methyl}-1,4-diazepan-1-yl)quinoline-6-carbonitrile or a pharmaceutically acceptable salt thereof.

44. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-Trifluoromethoxy-quinolin-2-yl)-1,4-diazepan-1-yl)methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

45. (*original*) A compound according to claim 1, wherein said compound is 2-[4-(6-Fluoro-quinolin-2-yl)-[1,4]diazepan-1-ylmethyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

46. (*original*) A compound according to claim 1, wherein said compound is (2S)-2-{{4-(6-Bromo-quinolin-2-yl)-1,4-diazepan-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

47. (*original*) A compound according to claim 1, wherein said compound is 8-Methyl-2-(4-quinolin-2-yl-[1,4]diazepan-1-ylmethyl)-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

48. (*original*) A compound according to claim 1, wherein said compound is 8-Methyl-2-[4-(4-methyl-quinolin-2-yl)-[1,4]diazepan-1-ylmethyl]-2,3-dihydro[1,4]dioxino[2,3-f]quinoline or a pharmaceutically acceptable salt thereof.

49. (*original*) A method of treating a subject suffering from a condition selected from depression, anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder, attention deficit disorder, obsessive-compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders, vasomotor flushing, cocaine and alcohol addiction, and sexual dysfunction, comprising the step of:
providing to said subject suffering from said condition, a therapeutically effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof.

50. (*original*) A method according to claim 49, wherein the condition is depression.

51. (*original*) A method according to claim 49, wherein the condition is selected from the group consisting of obsessive-compulsive disorder, panic attacks, generalized anxiety disorder, and social anxiety disorder.

52. (*original*) A pharmaceutical composition, comprising:
an effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof; and
a pharmaceutically acceptable carrier or excipient.